

23. The heart assist device of claim 22, wherein the first and second external tensile members respectively further comprise:

a plurality of tensile members configured to extend around the left ventricle,

5 a plurality of tensile members configured to extend around the right ventricle, and

wherein each of the pluralities of tensile members is secured at least indirectly to said support member.

24. The heart assist device of claim 23, wherein said support member further comprises a flat plate covered in a biocompatible material for inhibiting blood clotting.

25. The heart assist device of claim 23 further comprising:

a plurality of pulley members coupled with said tensile members and operating to allow a single powered actuator to pull multiple tensile members.

26. The heart assist device of claim 22 further comprising at least one internal tensile member configured to be connected lengthwise between the fibrous skeleton of the heart proximate the mitral valve or aortic valve and the apex of the left ventricle, said internal tensile member  
5 configured to inhibit lengthening of the left ventricle when the powered actuator pulls said tensile members to compress the left and right ventricles.

27. The heart assist device of claim 22, wherein said tensile members are contained in sleeves to prevent cutting of the heart by said tensile members during use.

28. The heart assist device of claim 22 further comprising a plurality of coronary obstruction preventing members configured to be disposed between said tensile members and coronary arteries on the outside of the heart for preventing the coronary arteries from being  
5 compressed and obstructed by the tensile members.

29. The heart assist device of claim 22, wherein at least one of said plurality of flexible external tensile members is configured generally in a spiral shape to facilitate the application of compression to the heart.

30. A device for assisting a heart having a plurality of ventricles separated by an interventricular septum, the device comprising:

an external member configured to receive at least a portion of a heart,

5 at least one support member extendable between opposite sides of the external member and configured to extend across and against one side of the interventricular septum,

a bladder configured for disposition between the external member and an outside surface of the heart; and

10 a pump for selectively inflating and deflating said bladder to apply compression to at least one of the ventricles as the support member supports a side of the interventricular septum opposite to said one ventricle.

# Differences

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[illegible]

# Differential Equations

# Differential Equations

[illegible]

37. A method of supporting a heart having left and right ventricles separated by an interventricular septum, the method comprising:

placing an external support element around an external surface  
of the heart adjacent at least one of the left and right ventricles,

5 placing an internal support element within the other of the left  
and right ventricles and against the interventricular septum,

adjusting the force of the external support element against the external surface of the heart by way of an adjustable connector on at least one of the internal and external support elements, and

10 retaining the internal and external support elements on the  
heart at the adjusted force.

38. A method of supporting a heart having a plurality of walls, the method comprising:

introducing at least one catheter into the heart,

5 introducing a heart support member through the catheter and into the heart, and

securing the heart support member adjacent at least one of the walls of the heart to restrict movement of the one wall during a heartbeat.

39. The method of claim 38, wherein the heart includes left and right ventricles separated by an interventricular septum, and said catheter is introduced into the right ventricle.

40. The method of claim 39, further comprising:  
securing the heart support member adjacent the  
interventricular septum within the right ventricle.

41. The method of claim 39, further comprising:  
supporting an outer surface of the left ventricle using the heart  
support member.

42. A method of supporting a heart having a plurality of walls, the method comprising:

securing a support member adjacent a weakened area of at least one of the walls, and

5 applying discreet pressure to a selected area of the weakened area using an inwardly projecting portion of the support member.



43. The method of claim 42, wherein the weakened area is an area containing a papillary muscle of the heart.

44. The method of claim 42, wherein the support member further comprises an annular band of rigid material, and the method further comprises:

5       securing a first portion of the band adjacent an external wall of the heart, and  
      securing a second portion of the band adjacent an internal wall of the heart.

45. The method of claim 44, wherein the heart includes left and right ventricles separated by an interventricular septum and wherein:

5       the first portion of the band is secured adjacent the interventricular septum of the heart, and  
      the second portion of the band is secured adjacent an external wall of at least one of the right and left ventricles.

46. A method of assisting the pumping action of the heart having left and right ventricles separated by an interventricular septum, the method comprising:

- 5 inserting a support member within one of the right and left ventricles and against the interventricular septum,
- encircling the outside of the other of the right and left ventricles with at least one external member, and
- coupling the external member with the support member, and
- compressing said one ventricle in a direction toward the
- 10 interventricular septum.

47. The method of claim 46, wherein the compressing step is performed by inflating a bladder between the external member and an outside wall of the heart.

48. The method of claim 46, wherein the compressing step is performed by pulling said external member with a tensile force.

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